The Health of New Hampshire's Community Hospital System

A Financial Analysis

Upper Connecticut Valley Hospital




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An Important Message to Readers of the Hospital Financial Analysis from the New Hampshire Department of Health and Human Services

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Introduction

The following Hospital Financial Analysis is a byproduct of the December 13 report, *The Health of New Hampshire's Community Hospital System*, issued by the New Hampshire Department of Health and Human Services. The individual financial narratives are part of a series of analyses addressing the financial condition of the state's health care system.

In the following report, you will find an analysis of the hospital's financial well being from 1993-1998, and **then an additional analysis** that covers the most recent period for which information is currently available, 1999. As audited financial statements for 2000 become available from the hospitals, this information will be updated.

Each hospital financial analysis is broken into five sections. These include:

- Background information on the hospital size, location, payor mix and affiliates;
- A Summary of the Financial Analysis;
- A Cash Flow Analysis;
- An Analysis of Profitability, Liquidity and Capital; and
- An Estimation of Charity Care and Community Benefits

Financial Benchmarks

Financial benchmarks include traditional measures of profitability, liquidity, solvency, and cash flow. Each of these areas of analysis is defined below. Additional information about the ratios or the nature of financial analysis can be obtained by consulting health care financial texts (Gibson 1992; Cleverley 1992).

Profitability:	Purpose	Calculation
Total Margin	Measures the organization's ability to cover expenses with revenues from all sources	Ratio of (Operating Income and Nonoperating Revenues)/Total Revenues
Operating Margin	Measures the organization's ability to cover operating expenses with operating revenues	Ratio of Operating Income/Total Operating Revenue
PPS Payment/Cost	Measures the relationship between Medicare PPS payments and Medicare PPS costs; numbers above 1 indicate that payments exceed costs	Ratio of Medicare Prospective Payment System (PPS) Payments /PPS Costs, derived from Medicare Cost Reports
Non-PPS Payment/Cost	Measures the relationship between payment and costs of all payment sources other than Medicare PPS[1]	Ratio of (Total Operating Revenue minus PPS Payments) / (Total Operating Cost minus PPS Costs)
Markup Ratio	Measures the relationship between hospital-set charges and hospital operating costs; generally only self-pay and indemnity payers pay hospital charges	Ratio of (Gross Patient Service Charges Plus Other Operating Revenue) / Total Operating Expense
Deductible Ratio	Measures the relationship between hospital's contractual discounts negotiated with (private payers) or taken by payers (Medicare and Medicaid) and hospital charges	Ratio of Contractual Adjustments/Gross Patient Service Revenue
Nonoperating Revenue Contribution	Measures the contribution of nonoperating revenues (activities that are peripheral to a hospital's central mission) to total surplus or deficit	Ratio of Nonoperating Revenues (includes unrestricted donations, investment income, realized gains (losses) on investments and peripheral activities)/Excess Revenue over Expense
Realized Gains to Net Income	Measures the contribution of realized gains (a subset of nonoperating revenues) to total surplus or deficit	Ratio of realized gains (losses)/Excess Revenue over Expense

[1] Medicare's Prospective Payment System includes only inpatient-related operating and capital costs and excludes Medicare payments for outpatient costs, which have not been part of PPS through 1998

Liquidity:		
Current Ratio	Measures the extent to which current assets are available to meet current liabilities	Current Assets/Current Liabilities
Days in Accounts Receivables	Measures how quickly revenues are collected from patients/payers	Patient Accounts Receivable/(Net Patient Service Revenue / 365)
Average Pay Period	Measures how quickly employees and outside vendors are paid by the hospital	(Accounts Payable and Accrued Expenses)/ (Average Daily Cash Operating Expenses)[2]
Days Cash on Hand	Measures how many days the hospital could continue to operate if no additional cash were collected	(Cash plus short-term investments plus noncurrent investments classified as Board Designated)/(Average Daily Cash Operating Expenses)
Solvency:		
Equity Financing Ratio	Measures the percentage of the hospital's capital structure that is equity (as opposed to debt, which must be repaid)	Unrestricted Net Assets/Total Assets
Cash Flow to Total Debt	Measures the ability of the hospital to pay off all debt with cash generated by operating and nonoperating activities	(Total Surplus (Deficit) plus Depreciation and Amortization Expense)/Total Liabilities
Average Age of Plant	Measures the relative age of fixed assets	Accumulated Depreciation/ Depreciation Expense

Hospitals As Integrated Systems of Care

Many of New Hampshire's hospitals have developed into systems of care with complex corporate organizational structures. Hospitals may be owned by a holding company or may themselves own other subsidiaries. (The hospital corporate organization charts will be made available with these financial narratives at a future date.) These individual analyses that follow attempt to isolate the hospital entity to the extent possible as the basis of analysis. This distinction is important because subsidiaries that operate within a larger hospital system may operate at higher or lower levels of financial performance than the hospital. For example, a home health agency impacted by Medicare reimbursement changes that result in an operating deficit might be directly supported by the hospital. On the other hand, an ambulatory surgical unit (or another entity within the holding company of which the hospital is a part of) with a healthy financial performance could have a positive impact on the hospital with an operating deficit.

[2] (Operating Expenses Less Depreciation Expense Less Bad Debt Expense)/365

Charity Care and Community Benefits

Each hospital financial analysis includes a section on Charity Care and Community Benefits. This section of the hospital financial narrative is more exploratory than are the other standardized financial benchmarks. For further background information or for specific information on how these measures were calculated, please see the *Analysis of Health Care Charitable Trusts in the State of New Hampshire.*

In 1999, the legislature passed the New Hampshire Community Benefits law (SB 69), which requires that all non-profit hospitals and other health care charitable trusts with $100,000 or more in their total fund balance complete a needs assessment of the communities that they serve. The legislation also calls for the hospitals and others to consult with members of the public within their communities to discuss what the provider has done in the past to meet community needs, what it plans to do in the future, and then submit the plan to the Attorney General's office.

New Hampshire's law is a reporting statute. It does not contain a dollar value or minimum threshold the non-profit trusts must meet. With this new statute, the hospitals and others are working to improve the measurement of charity care (free care) and other community benefits they provide in return for exemption from local, state and federal taxes. Since this law is relatively new, the audited financial statements used for the purpose of this community benefit analysis may not yet fully reflect the dollar value of community benefits beyond charges foregone for charity care or necessary but unprofitable services. New Hampshire's definition of community benefits is very broad; it includes free care but does not include bad debt or shortfalls in reimbursement from the Medicare and Medicaid programs.

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For More Information

Questions or comment concerning this report may be directed to the Office of Planning and Research at 603-271-5254.

UPPER CONNECTICUT VALLEY HOSPITAL
COLEBROOK, NEW HAMPSHIRE
1993 – 1999 FINANCIAL ANALYSIS

Upper Connecticut Valley Hospital in Coos County is a small acute-care facility with 20 beds [3]. As of 1997, Medicare followed by private insurers represented the largest percentage of payers for inpatient discharges (47 and 32%, respectively)[4].

In 1994, the Northern Coos Community Health Association (a not-for-profit home health organization) merged with the hospital. The Dartmouth-Hitchcock Alliance became the parent to the hospital in 1995. As a member of this system, the hospital is affiliated with Weeks Medical Center, Mary Hitchcock Memorial Hospital, the Dartmouth Medical Center, the Dartmouth-Hitchcock Clinic and several other hospital and health care organizations in New Hampshire, Vermont and Massachusetts.

Summary of Financial Analysis 1993-98

The hospital was able to build liquidity due to strong improvements in profitability, though profitability trends were not stable and were dependent on the hospital's ability to collect its markup from third-party payers or self-pay patients. The hospital did not increase its financial risk significantly by increasing its long-term borrowings in 1998, but 1998 operating and total profits dropped considerably below 1996 and 1997 levels.

Cash Flow Analysis 1993-98

The hospital generated most of its cash from equity sources of capital, though long-term debt represents 18% of total cash sources. Net income produced about one-third of the total cash over the period, generated mainly by improved operating profitability. This is reflected by more contribution to the cash sources from operating income (21% of the total cash sources) than nonoperating revenues (15%). Depreciation generated another 17% of the total cash. Transfers from restricted funds contributed 17% of the total cash over the period, though this was mainly due to an accounting policy change that reclassified funds. The hospital obtained 10% of its total cash by reducing its cash account.

Almost half of the total cash sources were used to invest in property, plant and equipment (PP&E). This was three times the level of depreciation expense over the period, and resulted in a decrease in the average age of plant from 12.4 to 10.8 years in 1998. The hospital used 37% of its cash to increase marketable securities. This allowed the hospital to build a large amount of liquidity – 293 days by 1998 – and to generate investment income to enhance the bottom line. Net working capital deteriorated, however, absorbing 15% of the hospital's cash over the period. Delayed collections of patients accounts receivables drove this trend, and at over 100 days in 1998, represent a red flag.

[3] The 1998 American Hospital Association Guide.
[4] 1997 data from the State of New Hampshire Department of Health and Human Services.

Ratio Analysis 1993-98[5]

Profitability

Despite tremendous improvements in profitability, performance was not stable. Improved operating margins resulted from growth in the markup of charges over cost and stable payer discounts. This led to operating margins as high as 10 to 12% in 1995 and 1997, which in turn resulted in total margins of 13 and 16%, respectively. However, margins dropped precipitously in 1998; 1998 operating margins were 2% and total margins dropped to 5%.

Nonoperating revenues did not contribute significantly in years of high profitability, though it did enhance the bottom line in years of thinned operating margins. By 1998, nonoperating gains contributed to over half of the bottom line. Realized gains did not contribute significantly to net income.

Liquidity

Though the hospital's current ratio is above 3 most years, much of that is due to growth in accounts receivable, resulting from slowed collections over the period – from 70 to 100 days. This growth in accounts receivable had a negative impact on the hospital's working capital.

Days cash on hand with short-term sources remained relatively stable until 1997, when it almost doubled to reach 41 days. It then dropped to 7 days in 1998. While this is low, the days cash including unrestricted marketable securities illustrates that the hospital has a large amount of cash balances – 293 days as of 1998. This level of liquidity was above the state median in 1997.

Capital Structure

The trend in the equity financing ratio (equity/total assets) indicates that the hospital's level of debt increased as short-term debt increased in 1997 and long-term debt was issued in 1998; however, the hospital is not highly leveraged with an equity financing ratio of 78% by 1998. This indicates that only 22% of the hospital's assets are financed by debt (short- and long-term sources).

Debt service indicators demonstrate that the hospital can easily meet its debt principal and interest payments. However, the cash flow to total debt measure fluctuated significantly with shifts in profitability, and continued erratic trends in profitability and debt coverage may make it difficult for this small hospital to service any future debt increases.

Charity Care and Community Benefits

Charity care reported as charges forgone ranged from 1 - 2% of gross patient service revenues over the period 1993 to 1998. This amount of charity care met the estimated value of the hospital's tax exemption in 1993, the hospital's least profitable year. In other years of decreased profitability, namely 1994 and 1998, this level of charity care with the addition of 50% bad debt met the estimated value of its tax exemption. With 100% bad debt, this benchmark was met in all remaining years except 1996, the most profitable year.

The hospital reported Medicaid costs exceeding payment in 1994 and 1995 as additional community benefits. Medicaid costs exceeding payment are not allowable under New Hampshire's community benefit statute. With the addition of these amounts to free care, the hospital met its estimated tax value benchmark in these years.

[5] NH state medians from The 1998-99 Almanac of Hospital Financial & Operating Indicators.

According to the 1998 American Hospital Association Guide, the hospital does not offer other services, such as a trauma center or neonatal intensive care unit, which could be considered an additional charitable benefit to the community.

Cash Flow Analysis 1993 - 1999

Upper Connecticut Valley Hospital relied on external sources of cash, including long-term debt (23%) and transfers from restricted funds (18%). Internal sources of cash included operating income, non-cash expenses, and non-operating revenues (50% of cash sources).

Fifty-five percent of the total cash sources were used to invest in property, plant, and equipment (PP&E). This was twice the level of depreciation expense over the same period. This investment in PP&E contributed to a decrease in the average age of the plant from 10.8 in 1998 to 7.16 in 1999. The hospital used 25% of its cash to increase marketable securities. This allowed the hospital to build a large amount of liquidity - 247 days by 1999 - and to generate investment income to enhance its bottom line. Net working capital deteriorated and absorbed 20% of the hospital's cash over the period. Delayed collections of accounts receivable - 131 days in 1999 compared to 106 days in 1998 - drove this trend. In addition, the decrease in accounts payable days to 4.79 days further depleted working capital.

1999 Ratio Analysis

Profitability

The operating margins dropped from 2% in 1998 to -3% in 1999. The total margins declined from 5% in 1998 to 1% in 1999. The net operating revenue and operating expenses have increased by 10% consistently; however, the provision for bad debt increased by 7% since 1998. Days in accounts receivable also increased from 91.57 days in 1997 to 131.96 days in 1999.

Liquidity

The day's cash on hand in 1999 with short-term sources were 15 days. It was an improvement from 1998 of 7.68 days. When board-designated funds are included, the days of cash on hand increased to 247 days (days cash on hand was 293 days in 1998).

Capital Structure

The equity financing ratio of 77% had not changed from the previous year. However, the debt service coverage ratio dropped to 3.02 from 8.66 the prior year due to the decline in profitability. The long-term debt to equity ratio increased from 0.07 in 1993 to 0.27 in 1999. While the hospital does not have a lot of long-term debt, its ability to service that debt has been adversely affected by its 1999 operating loss.

Charity Care and Community Benefits

Charity care reported as charges forgone was 1% of gross patient service revenues in 1999. Bad debt expenses were 9.47% of gross patient service revenue. In addition to providing charity care, the hospital operates an emergency room open twenty-four hours each day, seven days a week. The hospital also operates an ambulance service for the region and provides staff, expertise, and other resources for charity. It provides community health programs, including various health fairs, clinics, and cancer screening programs in local schools.

Summary

The overall performance of the hospital in 1999 was not good, given the -3% operating margin and very slow collection experience in its accounts receivable. While its cash balances are high and exceed the level of long-term debt, this small hospital could be vulnerable to sudden downturns in operating performance.

Source: Audited Financial Statements. Prepared by Nancy M. Kane, D.B.A. Harvard School of Public Health